

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011616**Date Inspected:** 27-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG COMPONENT**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

BAY#14

This QA Inspector observed the following work in progress:

FCAW in the 2F position for the OBG Cross Beam CB 11 bottom plate to stiffener , weld No. BP-026-011-16/17. The welder is identified as #062738. ZPMC QC is identified as Mr. Zhon Cheng. The welding variables recorded by QC appear to comply with WPS-B-T-2132 .

SAW in the 1G position for the OBG bottom plate BP-3029A to BP-3025A , weld No. SEG-3006A-004. The welder is identified as #045265. ZPMC QC is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-L2c-S-2.

FCAW in the 2G position for the OBG Segment 11DE, weld No. SSD16-PP104-090. The welder is identified as #058551. ZPMC QC is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2232-Tc-U4b-F .

SMAW in the 4F position for the OBG Segment 10CW, weld No. SEG-63E-171. The welder is identified as #067610. ZPMC QC is identified as Mr. Xu Tao. The welding variables recorded by QC appear to comply with

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## WELDING INSPECTION REPORT

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WPS-B-P-2114-FCM-1 .

FCAW in the 2G position for the OBG Segment 11DE, weld No. SSD16-PP104-105. The welder is identified as #058551. ZPMC QC is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2232-Tc-U4b-F .

During a random in process inspection of Orthotropic Box Girder (OBG) segment 10CW, this Caltrans Quality Assurance (QA) Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) weld repairs using a filler metal not specified on the applicable WPS. The repair was being performed to WPS-345+485-FCAW-3G (3F)-FCM-Repair. The WPS specifies the use of filler metal brand K-71TSR. The welder was using filler metal brand Super Cored 71H. The weld joint is a Complete Joint Penetration (CJP) identified as SEG-063E-160 near Panel Point (PP) 93. The weld being repaired is joining material grades A709 Grade 345 to A709 Grade 485. The weld is joining parts identified as RS65EA (485) to X3S (345).

This QA Inspector generated an incident report for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bera, Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson, Rodney	QA Reviewer

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